




# The Impact of Self Help Groups on the Psychosocial Well-Being of Female Members in Ethiopia

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## Abstract

Tearfund self-help groups are a variety of self-help group (SHG) aimed at poverty alleviation in Sub-Saharan Africa. Despite a number of positive evaluations of SHGs, there have been no direct studies of impact on psychosocial well-being. This paper reports the first phase of a mixed methods examination of the impact of Tearfund SHG membership on the psychosocial well-being of womens' SHGs in Ethiopia. Five young SHGs (<2 years) acted as a comparison for five older SHGs (> 5 years) across self-evaluations and standardised scales while covarying for chronological age. These results were enriched by focus groups, semi-structured observations and structured interviews. Results showed that members of older SHGs reported statistically greater psychosocial well-being on 4/10 self-evaluated impact indices and 2/3 of the standardised scales. The younger vs older group differences are significant but small. A richer understanding of the impact is gained through the qualitative reports. Future studies will be strengthened by the addition of longitudinal data, through adjusting measures better to the culture, and through collecting baseline data from SHG initiation. This study provides extensive qualitative and quantitative evidence of the impact of Tearfund SHG membership on psychosocial well-being.

**Keywords** Self-help groups · Poverty alleviation · Psychosocial well-being · Women's empowerment · Ethiopia · Mixed methods

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Over 400,000 people in Ethiopia are members of a particular variant of self-help group (SHG) targeted at poverty alleviation (Meehan and Mengistu 2016). More than 20,000 of these groups have been established and facilitated since 2002 with support from a number of affiliated Christian relief and development NGOs and their local partners. This SHG model, initially supported in Ethiopia by Tearfund (UK) based on the MYRADA model in India, and subsequently supported by partners, Tear Netherlands, Tearfund Ireland and Tearfund New Zealand and Tearfund Australia is referred to as Tearfund SHGs. Previous research has found a positive cost-benefit ratio demonstrating that SHGs can deliver a beneficial impact on members' living standards (Venton et al. 2013). Similarly, there have been positive evaluations of SHG impact on a variety of outcomes (Venton et al. 2013; Meehan and Mengistu 2016; Weingartner et al. 2017; Sahyoun 2016; Lawson-McDowall et al. 2016). However, there have been no direct studies of the impact of SHGs on member's psychosocial well-being. This paper presents a mixed methods evaluation on the psychosocial impact of Tearfund SHGs on its members.

A holistic approach to poverty alleviation combining monetary and non-monetary aspects of wellbeing is increasingly taken, due to the limitations of income as a proxy for the multiple ways in which a person can be deprived (Sen 1984; Alkire and Santos 2010; Myers 2011). Interviews with the poor frequently emphasize psychosocial factors such as dependency, social isolation/inclusion, access to education and employment opportunities, low civic participation, humiliation, hopelessness and powerlessness (Brock 1999; Chambers and Conway 1992; Narayan 2000). These factors can compound disadvantages and exacerbate poverty (Lund et al. 2011; Hulme et al. 2001). For instance, social exclusion can restrict a household's access to resources and opportunities (employment and education) resulting in multiple deprivations such as how gender discrimination is a barrier for women in developing countries (Sen 1984, 1999, 2000; Narayan-Parker 2002; OECD 2012; Samuel et al. 2017). Anxiety/depression can have economic impacts on households resulting in further anxiety/depression (Patel and Kleinman 2003; Lund et al. 2011).

Over the past forty years many types of group-based poverty alleviation programmes have linked collective action with finance in order to improve living standards and well-being. Groups differ depending on their primary goal(s), e.g. women's health and farmers group (Anderson 2014), and the extent to which they are savings-led or credit-led.

The modern conception of microfinance emerged in the 1970s when the Grameen Bank in Bangladesh offered formal credit to the poor through group-based joint liability (Yunus 1999). In the 1980's MYRADA supported self-help groups (SHGs) set up by the poor to address poverty in India. The concept emerged out of a failed cooperative credit system. Instead of seeking the return of loans, MYRADA noted that members exhibited a strong affinity conducive to saving and repayment and therefore advised the groups to manage the loans amongst themselves (Fernandez 2007). In the credit-led SHG model, savings are a precursor to formal bank or NGO credit. Members demonstrate credit discipline by saving for 6–8 months and then gain access to bank loans, adopting joint liability. In other models, SHGs can form for more specific purposes such as farmer's groups or women's health groups (Anderson 2014).

Kindernothilfe (KNH) and Tearfund established the first SHGs in Ethiopia in partnership with Ethiopian Kale Heywet Church Development Commission

(EKHCDC). The aim was to improve a person's holistic well-being (economic, spiritual and psychosocial), empowering women and improving standards of living through restoring community relationships and fulfilling unrealised potential. The philosophy was that of MYRADA adapted to the Ethiopian Context. Firstly, Tearfund SHGs are informal associations of 10 to 20 people, comprised predominantly of women from similar socioeconomic backgrounds and neighbourhoods. Second, they are self-governing - writing their own bylaws and managing their own business. Thirdly, Tearfund's resources go into facilitators who assist the SHG establishment and provide a range of training - financial management, hygiene, skills, literacy and on the importance of mutual support, social development and a collective capacity to solve member's problems (Desai and Joshi 2013). Fourthly, a distinctive feature of Tearfund SHGs is that they are funded entirely through members saving an agreed amount each week. After a fixed period, members gain access to small informal loans at low interest rates from the accumulated funds and agree loan repayment terms. Initial loans may be used for specific expenses or as a fund to reduce financial vulnerability to shocks but members are encouraged to set up individual and collective income generating activities (IGA). These ventures often consist of growing and selling produce, producing dairy products, purchasing and raising cattle (Weingartner et al. 2017).

## 1 Review of Literature

A range of positive psychosocial impacts have been claimed for SHGs. Studies in India have found members exhibit increased autonomy, political awareness and empowerment (Casini et al. 2015), awareness of local social issues (Arunkumar et al. 2016), greater participation in household decision making (Deininger and Liu 2009; Mukherjee and Kundu 2012), self-confidence and self-esteem (Moyle et al. 2006; Hashemi et al. 1996; Krishnaraj and Kay 2002; Putnam 2001). Although several systematic reviews of mixed methodology studies across the developing world have found more modest evidence. Anderson's (2014) review of medium to higher quality evidence from South Asia and Sub-Saharan Africa found a positive impact on perceptions of control of decision making, and subjective self-efficacy. Brody et al. (2016) found evidence in South Asia for positive impact on household decision making, mutual support and solidarity, political participation and networking to engage local authorities, women's mobility, women's control over family planning and community respect (effect sizes range from 0.06–0.41 SMD). The qualitative but not the quantitative research found evidence for psychological empowerment such as self-confidence. The discrepancy was interpreted as a result of cognitive biases or the inadequacy of quantitative measures.

One convenient approach to studying SHG impact is to examine how duration of membership relates to psychosocial well-being. Desai and Joshi (2013) examined the effects of two year's exposure to bank-linked women's SHGs and found SHG members to exhibit greater personal autonomy through increased participation in household decisions and greater involvement in civic activities but no significant increase in income. Sahu (2015) also compared women with at least three or more years of SHG membership v non-members and found greater total empowerment for SHG members (13.2% v 1%), greater gains in economic security, physical mobility, political

participation, self-confidence, public interaction, though not of autonomy in decision making over child birth.

The research specific to Tearfund SHGs in Ethiopia is similarly positive, though sparse, on the psychosocial impact. Moorthy reported on four case studies of SHG members; stories are very positive but the research is open to selection bias. Abiche (2012) directly compared SHGs and Iddirs (an indigenous Ethiopian community financial-security group) and found SHG members were more likely to be engaged in entrepreneurship activities and involved in decision making and reported higher levels of trust in each other. There are positive evaluations of Tearfund SHGs' impact on drought resistance (Meehan and Mengistu 2016), food security (Weingartner et al. 2017), household economy (Sahyoun 2016), women's empowerment (Lawson-McDowall et al. 2016), social development (Lawson-McDowall et al. 2016) and community advocacy (Lawson-McDowall et al. 2016). However, the evidence in favour of the psychosocial impact of Tearfund's approach is only anecdotal. First, the claims in favour of psychosocial benefits of SHGs are very positive across the developing world but rigorous research suggest that the outcomes may be more modest. Second, while the literature is growing there is a scarcity of impact evaluations of SHGs on psychosocial well-being in Ethiopia, particularly direct impact evaluations of the Tearfund intervention.

One consistent theme in research is the power of income and other indicators of financial status as predictors of subjective wellbeing (SWB). Income might be expected to have a wide-ranging effect on people's ability to maximize their quality of life, precisely because income itself has the potential to affect so many other life circumstances. In addition to the obvious benefits for material possessions, income can allow people to purchase better health care, more interesting leisure experiences, and many other objective benefits in their lives (Argyle and Furnham 1998; Diener and Biswas-Diener 2002; Diener and Oishi 2000; Ng 2013; Stevenson and Wolfers 2013; Weiman et al. 2015; and Xiao 2014). In a large and representative sample of nations and individuals, Diener et al. (2013) found that rising income was associated with both positive affect and life satisfaction. These researchers found that an increase in GDP per capita was indeed associated with an increase in mean life satisfaction when it was not accompanied by growing income inequality during the study period. However, on theorizing the links between income and SWB is that this association varies in different contexts and individual difference.

The purpose of this study was to assess the impact of self-help groups on the psychosocial well-being of female members in Ethiopia. To comprehensively capture members' experience of the SHG impact the study adopted a mixed methods approach. An individual survey with quantitative and qualitative elements was supplemented with focus groups with each SHG. The study also examined the mechanisms by which the SHGs achieve their impact; these data have been presented in the official report of the study<sup>1</sup> (Cromie et al. 2017) and will be examined in more detail in a subsequent paper. Self-assessed impact was measured by asking two questions about each area of impact (psychological, education etc.): how much has that aspect of your life changed since

<sup>1</sup> This report presents the data from this paper in an accessible format for the funders and general public but does not provide the detailed academic quantitative & qualitative analysis and discussion in the context of the academic literature presented in the current paper.

joining the SHG and how much of that change was due to the SHG. The objective was to give the SHG members the opportunity to disentangle the impact of SHG membership from other events or factors that may have influenced their well-being. The standardised scales used in the study were Ryff's (1989) 54-item psychological well-being scale, Keyes' (1998) 33-item social well-being scale, and Steger et al. (2006) meaning in life scale.

The study addresses the following research questions:

1. Do members of more mature SHG assess the impact of the SHG on their own psychosocial well-being more highly than members of younger SHGs?
2. Do members of more mature SHG show higher psychosocial well-being measured on standard scales than members of younger SHGs? The well-being measures have not, to our knowledge, previously been used with an Ethiopian sample so a subsidiary question is whether the scales retain their reliability and structure.
3. How do members describe the impact of SHG on their psychosocial well-being?

Based on the positive impact evaluations of similar SHGs and the greater performance of older SHGs, it was predicted that members of older SHGs would score higher on well-being indices on the self-assessed and standardised scales (Desai and Joshi 2013; Sahu 2015).

## 2 Method

### 2.1 Design

The study comprised a mixed-methods study of ten SHGs. The SHGs were chosen to meet the study's design criteria of comparing younger versus older groups. Five young (less than 2 years) acted as a control group for comparison with five older (more than 5 years) SHGs.

This paper reports data primarily from two collection methods:

- Surveys of the SHG members: Standardized scales of psychosocial and spiritual well-being, demographic data, self-evaluations of status and changes since joining the SHG in finances, health, education, and well-being.
- In-depth focus groups with the SHGs focused on elaborating their understanding of how the SHGs work and how they influence change in their members' lives.

The study also profiled SHGs using a structured interview with key informants and used semi-structured observations of the focus groups but these data are not reported in this paper.

### 2.2 Impact

The impact of the SHG was examined in three ways:

1. Participants were asked to self-assess the impact of the SHG on different dimensions of their life (self-assessed impact). A 5-point Likert scale asked how much a dimension had changed since joining the SHG ('much worse' to 'much better') and

a 4-point Likert scale asked how much of this change was down to the SHG ('SHG had no impact' to 'It was only because of the SHG'). A composite variable was created by computing the mean of the two scales (multiplying the second by 1.2 to ensure they got equal weight).

2. Standard scales (scale-assessed impact) as detailed below.
3. Participants were asked – in the surveys and focus groups – to describe how the SHG has impacted different aspects of their lives.

## 2.3 Qualitative Methodology

All qualitative data was integrated for analysis to gain as much contextual information as possible. This was done to counteract the potential information lost in the translation process. Integrating the data also provided a reliability measure as all responses from a given SHG across interviews and surveys could be compared, determining the consistency of the emerging categories or themes. A Grounded Theory approach was used to analyse the data; as such, no existing theoretical framework influenced the coding and categorisation of any emerging themes. As part of the first cycle coding process, initial codes were assigned to the data using a combination of descriptive, in vivo, process, emotion and values coding (Miles et al. 2014). The initial codes were then revised by re-coding the raw data to ensure the reliability and internal consistency of the interpretations of the data. Some codes were replaced or changed to ensure they had conceptual unity and that they related to each other in an empirically meaningful way. The next stage in the process involved grouping the first cycle of codes into a smaller number of categories, i.e. pattern codes. These pattern codes are interpretive, researcher-generated reflections on what the initial codes have in common; consisting of themes and explanatory summarisers.

## 2.4 Participants

137 SHG members participated in the surveys (Female = 136, Male, =1). They derived from 10 SHGs. Five SHG's came from Oromiya (69 members) and five from SNNPR (68 members) regions of Ethiopia. Members ranged in age from 19 to 63 with a mean age of 36 (SD = 9.7).

Table 1 shows the breakdown of participants by religion – almost all were either Orthodox or Protestant (The term “protestant” is used to refer to members from a range of churches from the Evangelical/Pentecostal protestant tradition, including the Ethiopian Kale Heywet Church, Mekene Yesus and Apostolic churches).

## 2.5 Materials

### 2.5.1 Psychological Well Being Scale (Ryff 1989)

The study used the 54-item version of Ryff's psychological well-being scale (PWB). Van Dierendonck (2004) reported adequate reliability of the scale ( $\alpha = .75$ ) on a student sample. No studies were found to have used the PWB scale in an Ethiopian context but

**Table 1** The religious affiliation of the study participants

Religion	Frequency	Percentage
Orthodox	82	60%
Protestant/Evangelical/Pentecostal	52	38%
Catholic	1	1%
Muslim	2	1%
Total	137	

versions of the PWB scale have been used in non-Anglo-Saxon cultures (Van Dierendonck 2004).

In the present study, the full 54-item PWB scale was found to have questionable reliability ( $\alpha = 0.616$ ) based on the George and Mallery's (2003) Cronbach guide. After removal of the 14 lowest loading items (items 2, 3, 4, 5, 12, 14, 18, 22, 27, 30, 38, 48, 50, 52) the remaining 40-item PWB scale's overall Cronbach alpha improved to acceptable ( $\alpha = .75$ ). None of the subscales were of sufficient reliability to be used (Autonomy  $\alpha = 0.343$ ; Environmental Mastery  $\alpha = 0.303$ ; Personal Growth  $\alpha = 0.324$ ; Positive Relations  $\alpha = 0.422$ ; Purpose in Life  $\alpha = 0.368$ ; Self-acceptance  $\alpha = 0.007$ ).

### 2.5.2 Social Well-Being Scale (Keyes 1998)

The 33-item version of Keyes' social well-being scale (SWB) was used. Keyes (1998) found the SWB to have adequate reliability ( $\alpha = .75$ ) in a sample of 373 US adults. Similar reliability ( $\alpha = .71$ ) was found in a sample of 630 Chinese adults (Li et al. 2014). There have been no applications of the SWB scale in an Ethiopian context. In the current study the full 33-item SWB scale was found to have questionable reliability ( $\alpha = .437$ ). Seven problematic items (1,12,28,33,29,31,13) when removed raised reliability to acceptable ( $\alpha = .702$ ).

### 2.5.3 The Meaning in Life Questionnaire (Steger et al. 2006)

Steger's 10-item Meaning in Life Questionnaire (MLQ) was used. Steger et al. (2006) reported high reliability (time 1:  $\alpha = .83$ , time 2:  $\alpha = .89$ ) for the MLQ on a student sample. A separate study examining an Australian sample of 682 older-adults found high reliability ( $\alpha = .89$ ). No studies were found to have used the MLQ in an Ethiopian context. In this study, the 10-item MLQ suffered from two problematic items (5, 6). Once removed, the overall scales Cronbach alpha raised from poor ( $\alpha = .58$ ) to questionable reliability ( $\alpha = .63$ ).

The six-item Gratitude Questionnaire (McCullough et al. 2002) was also used in the study but found to be highly unreliable ( $\alpha = -.25$ ) and was dropped for analysis. Similarly, the Psychological Safety Scale Edmondson (1999) was employed but dropped due to unacceptable reliability ( $\alpha = .108$ ). Several items were removed but it did not sufficiently improve the Cronbach.



## 2.6 Survey

Survey items were additionally included to gather data on demographic variables and perceived changes and the contribution of the SHG to those changes. The focus group, interview and observation protocols were developed specifically for this study. The survey, interview and focus group schedules were developed in English and translated into Amharic, the Ethiopian national language.

## 2.7 Procedure

The data-gathering took place over a two-week period in November–December 2016 taking one day for each SHG. The research was carried out at locations accessible to the SHG members, typically a local church or school. Members of each selected SHGs were invited to attend the research location together on a particular morning. They were briefed as a group about the study and the ethical procedures - consent, confidentiality. Consent was gathered verbally and the surveys administered orally since many of the participants were not literate.

Surveys were carried out by a team of SHG facilitators who had been briefed on the survey instrument. For many participants, particularly in Wolaita, the survey needed to be translated from Amharic to their local language by the survey administrators.

In the afternoon, the SHG members returned to the research location for the focus group. Depending on the weather and facilities, the focus groups were conducted in the church/school building or outside. The focus group was facilitated in Amharic by one of the research team – Mengistie Rebsso. A local facilitator acted as interpreter for those not familiar with Amharic. Most of the members participated in the focus groups; there were a small number who only took part in the survey.

## 3 Results

### 3.1 Quantitative Impact

#### 3.1.1 Scale Assessed Overview

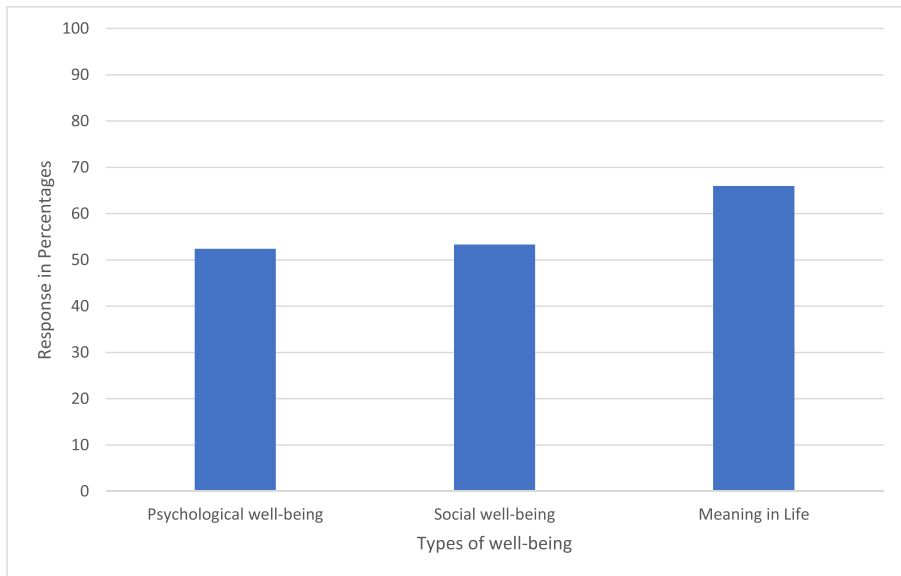
The SHG members surveyed scored positively on all the established scales of well-being (see Fig. 1). Members scored a psychological well-being mean of 3.63 (SD = 0.22) on a 6-point scale, a social well-being a mean of 4.2 (SD = 0.29) on a 7-point scale and on the meaning in life scale mean of 4.96 (SD = 0.61) on a 7-point scale.

A reliability analysis was conducted on the established scales used in the study. The scales in their original forms were found to be below acceptable unreliability. They were revised by removing problematic items until reliability reached acceptable levels (George and Mallery 2003). The revised scales were used for further analysis.

#### 3.1.2 Self-Assessed Impact

Since SHGs are primarily targeted at poverty alleviation we included a financial self-assessment in the survey. Members reported on average a 143% increase in their assets





**Fig. 1** Outcome for different types of well-being

since joining the SHG this was significantly greater for older than younger SHGs (Older SHGs Median = 34,000 ETB, Younger SHGs Median = 5000 ETB;  $U = 934$ ,  $n = 78,51$ ,  $p < 0.01$  two-tailed) than found in the population as a whole.

We created a composite variable, ‘perceived impact’ (PI), a single figure representing the perceived impact for the each of the different dimensions of well-being on the self-assessed measures. PI was derived from asking participants two questions about different aspects of member’s lives: How much have these aspects of your life changed since joining the SHG? And how much of this change has been due to the SHG? We then combined the amount of change they reported in that dimension with the contribution of the SHG to that dimension. The composite variable was created by computing the mean of the two scales (multiplying the second by 1.2 to ensure they got equal weight).

Before creating the composite variable, we graphed SHG change and SHG contribution which showed a positive image of the role of SHG in improving various aspects of member’s lives (Fig. 2).

As can be seen in Fig. 3, members scored positively on all PI variables, though education was relative lower than the others. (5-point scale, 1 = not changed or been impacted by SHG, 5 = changed positively or been impacted by SHG). The change scores were: Health ( $M = 3.88$ ,  $SD = 0.75$ ), spiritual ( $M = 3.99$ ,  $SD = 0.62$ ), finance ( $M = 4.14$ ,  $SD = 0.66$ ), family ( $M = 4.13$ ,  $SD = 0.60$ ), psychological ( $M = 4.07$ ,  $SD = 0.58$ ), family social ( $M = 4.06$ ,  $SD = 0.64$ ), social ( $M = 4.20$ ,  $SD = 0.53$ ), family spiritual ( $M = 3.92$ ,  $SD = 0.66$ ) and education ( $M = 3.32$ ,  $SD = 1.01$ ).

### 3.1.3 Tests of Normality

Kolmogorov-Smirnoff tests were carried out on scale and self-assessed variables. Scale assessed variables such as psychological well-being were found to be normally

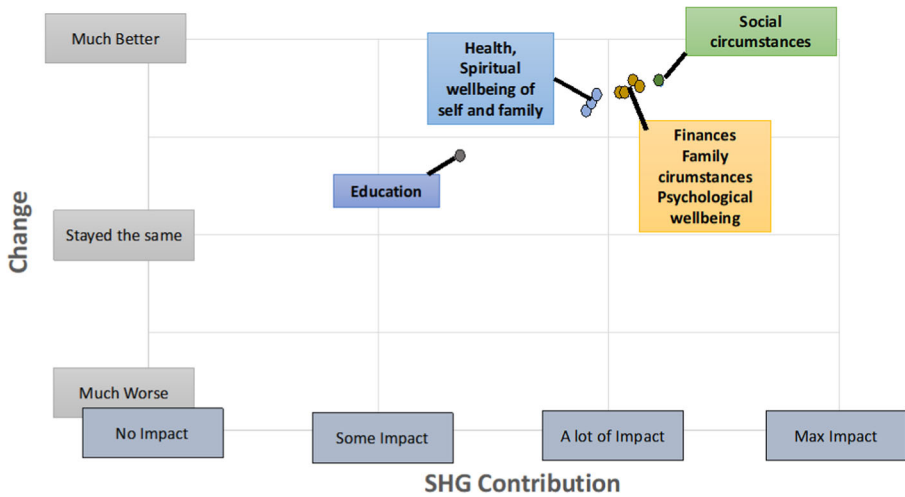


Fig. 2 SHG change by SHG contribution

distributed while social well-being and meaning in life were found to be not normally distributed. All perceived impact self-assessed variables were also found to be not normally distributed.

### 3.1.4 Age of Members

Spearman’s rank-order correlations revealed no significant relationship between member age and scale-assessed well-being measures. (Psychological well-being,  $r_s(136) =$

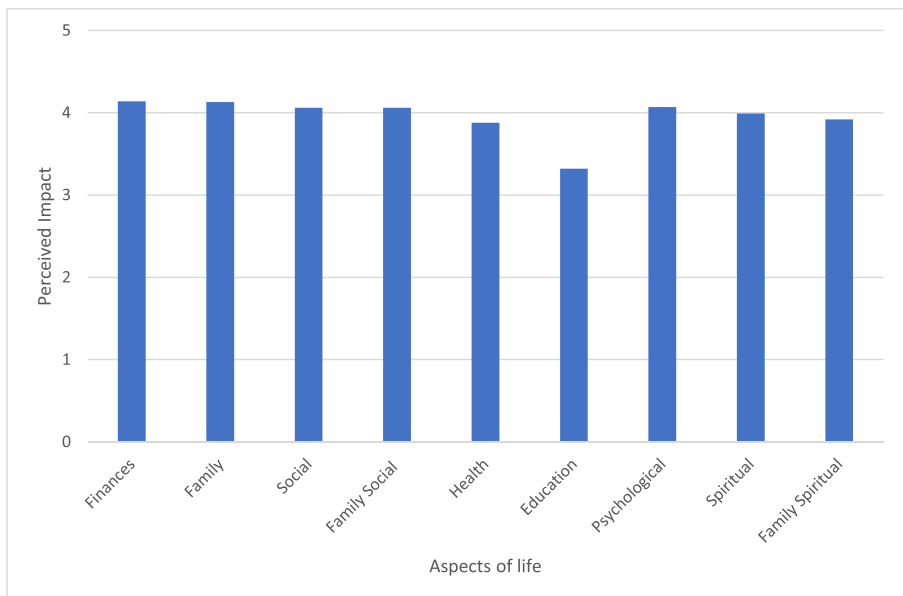


Fig. 3 Perceived Impact of SHG on well-being dimensions

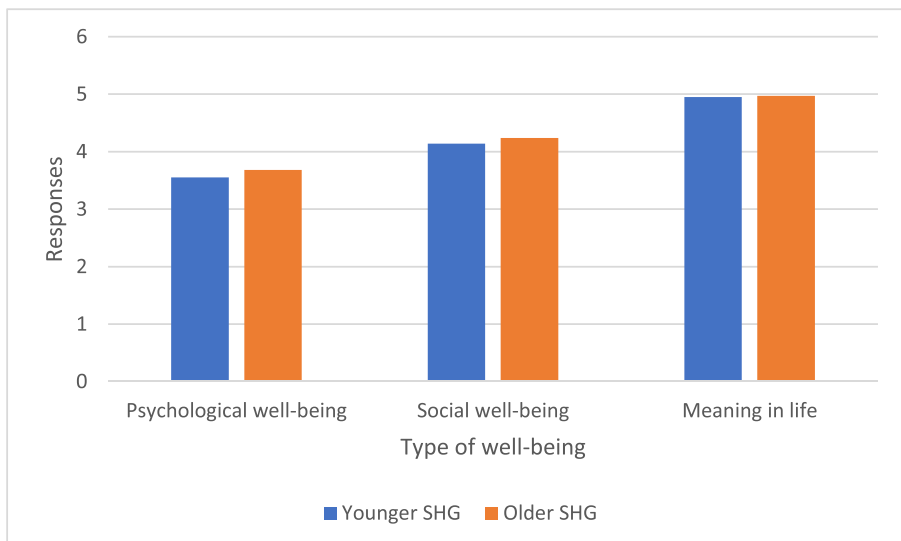
.057,  $p = .507$ ; social-well-being,  $r_s(136) = .115$ ,  $p = .181$ ; meaning in life,  $r_s(136) = -.152$ ,  $p = .077$ ).

However member age showed a moderate, positive and significant Spearman correlation with some perceived impact scores: finance ( $r_s(136) = .389$ ,  $p = .000$ ), family ( $r_s(136) = .368$ ,  $p = .000$ ) and social perceived impact variables ( $r_s(136) = .374$ ,  $p = .000$ ), and a weak, positive and significant correlation with others: family ( $r_s(136) = .270$ ,  $p = .000$ ), education ( $r_s(136) = .209$ ,  $p = .000$ ), psychological ( $r_s(136) = .209$ ,  $p = .000$ ), spiritual ( $r_s(136) = .211$ ,  $p = .000$ ) and family's spirituality ( $r_s(136) = .163$ ,  $p = .006$ ). Only perceived health impact was not significantly correlated with member age ( $r_s(136) = .147$ ,  $p = .0.08$ ).

### 3.1.5 Scale Assessed Impact

It was hypothesized that older SHGs would experience greater positive impact than younger SHGs. All scale assessed well-being scores were higher for older SHGs than for younger SHG's: psychological well-being (older SHGs,  $M = 3.68$ ,  $SD = 0.23$ ; younger SHGs,  $M = 3.55$ ,  $SD = 0.19$ ), social well-being (older SHGs,  $M = 4.24$ ,  $SD = 0.31$ ; younger SHGs,  $M = 4.14$ ,  $SD = 0.26$ ); meaning in life (older SHGs,  $M = 4.97$ ,  $SD = 0.65$ ; younger SHGs,  $M = 4.95$ ,  $SD = 0.54$ ), seen in Fig. 4.

An ANCOVA test compared young and old groups on scale assessed variables controlling for individual age. There were significant differences in psychological well-being [ $F(1,133) = 11.461$ ,  $p < 0.01$ ] and social well-being [ $F(1,133) = 4.151$ ,  $p < 0.05$ ] between young and old groups, with older groups scoring higher (see Tables 2 and 3). However, the effect sizes for these differences were small, .08 and .03 respectively, based on Cohen's (1988) convention. There was no significant difference between young and old groups in meaning in life [ $F(1,133) = 0.044$ ,  $p > 0.05$ ] (see Table 4).



**Fig. 4** Response scores on psychological well-being, social well-being and meaning in life

**Table 2** ANCOVA comparing young and old groups on scaled-assessed psychological wellbeing controlling for individual age

Psychological wellbeing	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	.575a	2	.287	5.834	.004	.081
Intercept	108.100	1	108.100	2193.882	.000	.943
Age	.047	1	.047	.953	.331	.007
SHGAge	.565	1	.565	11.461	.001	.079
Error	6.553	133	.049			
Total	1796.905	136				
Corrected Total	7.128	135				

a. R Squared = .081 (Adjusted R Squared = .067)

### 3.1.6 Self-Assessed Significance Tests

It was hypothesized that older SHGs would see greater positive impact than younger SHGs. All older group PI variables scored a higher mean than younger groups (See Fig. 5 below).

Although dependent variables were found to be non-normally distributed, ANCOVA is considered robust under such violations of normality (Levy 1980). ANCOVA tests compared young and old groups on each PI variable while controlling for individual age. Results show significant differences between younger and older groups while controlling for individual age in the perceived impact on finance [ $F(1,133) = 7.281, p < 0.01$ ], education [ $F(1,133) = 5.18, p < 0.05$ ], family [ $F(1,133) = 8.693, p < 0.01$ ] and social [ $F(1,133) = 7.176, p < 0.01$ ] with small effect size in the range 0.04–0.06 (see Tables 5, 6, 7 and 8). Other PI measures were found to not be significant such as psychological [ $F(1,133) = 2.844, p > 0.05$ ], spiritual [ $F(1,133) = 2.770, p > 0.05$ ], family social [ $F(1,131) = 1.365, p > 0.05$ ], health [ $F(1,133) = .267, p > 0.05$ ], family spiritual [ $F(1,131) = .545, p > 0.05$ ] (see Tables 9, 10, 11, 12, and 13).

**Table 3** ANCOVA comparing young and old groups on scaled-assessed social wellbeing controlling for individual age

Social wellbeing	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	.352a	2	.176	2.076	.129	.030
Intercept	145.179	1	145.179	1710.380	.000	.928
Age	.056	1	.056	.661	.418	.005
SHGAge	.352	1	.352	4.152	.044	.030
Error	11.289	133	.085			
Total	2416.112	136				
Corrected Total	11.642	135				

a. R Squared = .030 (Adjusted R Squared = .016)

**Table 4** ANCOVA comparing young and old groups on scaled-assessed meaning in life controlling for individual age

Meaning In Life	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	.236a	2	.118	.317	.729	.005
Intercept	182.678	1	182.678	489.318	.000	.786
Age	.231	1	.231	.618	.433	.005
SHGAge	.016	1	.016	.044	.834	.000
Error	49.653	133	.373			
Total	3403.797	136				
Corrected Total	49.890	135				

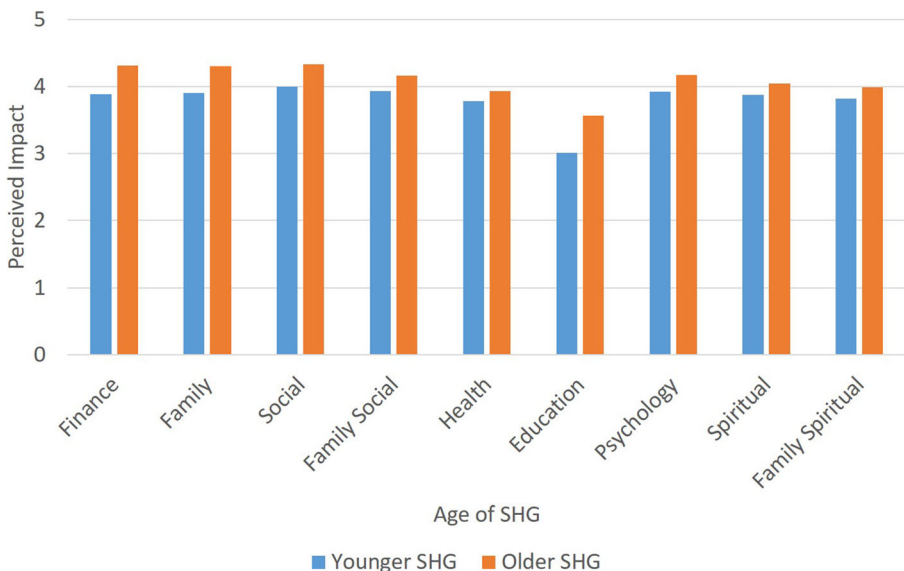
a. R Squared = .005 (Adjusted R Squared = -.010)

### 3.2 Qualitative Impact

The responses from the focus groups and the qualitative answers from the surveys were analysed for themes related to SHG impact. The main impact themes from the focus groups and surveys are presented below along with a table identifying the sub-themes, the source of the theme, the frequency of its occurrence and a representative quote (Table 14).

#### 3.2.1 Poverty - Increased Finances

Arguably, the primary goal of the SHG is to improve the financial situations and alleviate poverty. SHG members discussed in both the survey and focus groups how they experienced extreme poverty before joining the group.



**Fig. 5** Comparison between young and older SHGs on well-being dimensions

**Table 5** ANCOVA comparing young and old groups on perceived impact on finance controlling for individual age

Finance	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	7.591 <sup>a</sup>	2	3.795	9.539	.000	.125
Intercept	106.959	1	106.959	268.811	.000	.669
Age	1.596	1	1.596	4.011	.047	.029
SHGAge	2.937	1	2.937	7.381	.007	.053
Error	52.920	133	.398			
Total	2393.650	136				
Corrected Total	60.511	135				

<sup>a</sup> R Squared = .125 (Adjusted R Squared = .112)

*“living from hand to mouth”*

*“we did not have any amount of money”*

*“no accessibility to electric power or water supply”*

An inability to provide basic needs for the themselves or their families, including ‘*medication costs*’, educational opportunities and in some instances access to electricity or water. Without capital or loan resources members expressed how they were forced to seek loans from ‘*individuals or local money lenders*’ which would exacerbate their own poverty due to higher interest demands. Due to the nature of the SHG, this situation is drastically improved as the group has become the member’s ‘*livelihood*’ creating financial capital which acts as a stepping stone leading to other financial opportunities through IGA’s, further increasing the member’s income. These IGA’s include providing a local food supply and house renting.

Members discussed how they are now able to afford basic necessities as well as offering new vocational opportunities.

**Table 6** ANCOVA comparing young and old groups on perceived impact on family life controlling for individual age

Family	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	5.612 <sup>a</sup>	2	2.806	8.420	.000	.113
Intercept	115.194	1	115.194	345.631	.000	.724
Age	.620	1	.620	1.860	.175	.014
SHGAge	2.897	1	2.897	8.693	.004	.062
Error	43.994	132	.333			
Total	2364.280	135				
Corrected Total	49.606	134				

<sup>a</sup> R Squared = .113 (Adjusted R Squared = .100)

**Table 7** ANCOVA comparing young and old groups on perceived impact on social life controlling for individual age

Social	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	4.764 <sup>a</sup>	2	2.382	9.144	.000	.121
Intercept	116.755	1	116.755	448.245	.000	.771
Age	.979	1	.979	3.760	.055	.027
SHGAge	1.869	1	1.869	7.176	.008	.051
Error	34.643	133	.260			
Total	2444.330	136				
Corrected Total	39.406	135				

<sup>a</sup> R Squared = .121 (Adjusted R Squared = .108)

*“We start to own household materials. Basic need materials ... we are able to eat three time a day which we could not do in the previous time”*

*“by taking a loan from the SHG, I am fattening sheep and selling them in better price”*

Access to capital allows members to feel secure and capable of handling any issue that requires funds or to pursue entrepreneurial aspirations; engaging with the economy through participation in IGAs, contributing financial investments in infrastructure as well as setting up a kindergarten school.

*“in the name of our group we launched or opened a kindergarten level of school in our community”*

*“ we had contributed about 200.00 birr to the Great Ethiopian Renaissance Hydropower Dam”*

**Table 8** ANCOVA comparing young and old groups on perceived impact on education controlling for individual age

Education	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	10.752 <sup>a</sup>	2	5.376	5.584	.005	.077
Intercept	63.898	1	63.898	66.374	.000	.333
Age	1.619	1	1.619	1.681	.197	.012
SHGAge	4.986	1	4.986	5.180	.024	.037
Error	128.038	133	.963			
Total	1637.040	136				
Corrected Total	138.790	135				

<sup>a</sup> R Squared = .077 (Adjusted R Squared = .064)



**Table 9** ANCOVA comparing young and old groups on perceived impact on psychology controlling for individual age

Psychology	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	3.536 <sup>a</sup>	2	1.768	5.453	.005	.076
Intercept	107.571	1	107.571	331.729	.000	.714
Age	1.166	1	1.166	3.596	.060	.026
SHGAge	.922	1	.922	2.844	.094	.021
Error	43.128	133	.324			
Total	2306.660	136				
Corrected Total	46.665	135				

<sup>a</sup> R Squared = .076 (Adjusted R Squared = .062)

A marked improvement in the quality of life was also expressed as members often spoke of the ability to feed their families more substantially and provide medical treatments. Resulting from an increase in finances, members don't feel the burden of poverty; reflecting how the SHG model is proving effective from a financial perspective.

### 3.2.2 Dependence – Independence (Access to Capital)

Before joining the SHG members expressed how they were '*dependent on others for survival*'. A dependence on their husband's income as well as private money lenders was commonly illustrated by the members; SHG members are predominantly women.

*"some of us were totally dependent on our husbands"*

*"we were forced to pay higher rate of interest to individuals or local money lenders"*

**Table 10** ANCOVA comparing young and old groups on perceived impact on spirituality controlling for individual age

Spirituality	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1.139 <sup>a</sup>	2	.570	1.479	.232	.022
Intercept	129.254	1	129.254	335.638	.000	.716
Age	.032	1	.032	.083	.774	.001
SHGAge	1.067	1	1.067	2.770	.098	.020
Error	51.218	133	.385			
Total	2217.970	136				
Corrected Total	52.358	135				

<sup>a</sup> R Squared = .022 (Adjusted R Squared = .007)

**Table 11** ANCOVA comparing young and old groups on perceived impact on family social life controlling for individual age

Family social lift	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	3.003 <sup>a</sup>	2	1.502	3.746	.026	.054
Intercept	102.117	1	102.117	254.765	.000	.660
Age	1.207	1	1.207	3.011	.085	.022
SHGAge	.547	1	.547	1.365	.245	.010
Error	52.509	131	.401			
Total	2272.930	134				
Corrected Total	55.512	133				

<sup>a</sup> R Squared = .054 (Adjusted R Squared = .040)

However, the group provides a safety net for its members acting as their ‘insurance’ and ‘refuge’ as well as problem solver when they are in need of ‘urgent help’.

*“now, I can get money without problems and then solve my problems”*

The largest contribution to the members’ increased independence is due to being able to access capital much more readily.

*“When family members get sick, we took loans from the group and get adequate and appropriate medications”*

This access to capital allows members to feel secure and capable of handling any issue that requires funds or to pursue entrepreneurial aspirations.

**Table 12** ANCOVA comparing young and old groups on perceived impact on health controlling for individual age

Health	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	2.743 <sup>a</sup>	2	1.372	2.446	.091	.035
Intercept	92.645	1	92.645	165.199	.000	.554
Age	1.715	1	1.715	3.057	.083	.022
SHGAge	.150	1	.150	.267	.606	.002
Error	74.588	133	.561			
Total	2127.990	136				
Corrected Total	77.331	135				

<sup>a</sup> R Squared = .035 (Adjusted R Squared = .021)

**Table 13** ANCOVA comparing young and old groups on perceived impact on self and family spirituality controlling for individual age

You and family spirituality	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1.737 <sup>a</sup>	2	.868	1.977	.143	.029
Intercept	98.535	1	98.535	224.385	.000	.631
Age	.803	1	.803	1.828	.179	.014
SHGAge	.239	1	.239	.545	.462	.004
Error	57.527	131	.439			
Total	2125.580	134				
Corrected Total	59.263	133				

<sup>a</sup> R Squared = .029 (Adjusted R Squared = .014)

### 3.2.3 Education

SHG members discussed, in both the survey and focus groups, how a lack of financial education was a distinct gap in their knowledge, previous to joining the group. Specifically, a lack of knowledge about saving or how to manage finances was typically expressed as *‘living from hand to mouth’* or lacking in a *‘saving culture’*. This educational lack kept members in a state of poverty restricting access to loans or capital; thus hindering potential business endeavours.

*“I was participating in mini business but it was not such effective because I did not know how to manage the money”*

After joining the group, members discussed how this aspect of their education has greatly improved. By providing the teachings and skills needed to run a successful business, including the principles of saving, accounting and finance, members have become more confident in their financial capacity allowing them to generate income through IGA’s.

*“the knowledge that I have obtained in the training helped me to start working in IGA’s and I am getting benefits”*

This financial improvement has enabled members to provide formal education for their children; which, in turn, has increased their children’s capacity to generate finance.

*“my children were out of school because of money constraint but now they’re at school, and they are running some small-scale business, own some properties”*

The training provided by the SHG has not been limited to financial understanding but included the promotion of health-conscious behaviours through the implementation of proper hygiene and other preventative behaviours such as promptly seeking medical treatment when health issues arise.

**Table 14** Themes and subthemes with frequency of mention in interviews & number of focus groups which mentioned each

Poverty - Increased Finances				Dependence - Independence				Education			
Subtheme	Mentions in interviews		Focus Groups	Subtheme	Mentions in interviews		Focus Groups	Subtheme	Mentions in interviews		Focus Groups
	N	%			N	%			N	%	
Poverty	42	10		Dependence	19			Lack of education	48		
Increased Finances	83			Access to Capital	81			Education	67		
Quality of Life	73			Lack of Independence		5	50	Education (children)	41		
Access to Capital	81			Safety		9	90	Access to education	111		
Commerce	51			Problem Solver		5	50	Education			10
Standard of Living	101										
Accessing Medical Treatment	32										
Community Development			5								
Provider			9								

**Table 14** (continued)

Subtheme	Poverty - Increased Finances		Education		Social Development - Social Skills		Personal Development-		
	Focus Groups %	Mentions in interviews	Focus Groups %	Mentions in interviews	Subtheme	Focus Groups %	Subtheme	Mentions in interviews	Focus Groups %
Poverty		N		N				N	
Increased Finances		Social isolation		40			Personal development	37	8
Quality of Life		36					Confidence –Autonomy	60	80
Access to Capital		28					Anxiety alleviation	41	
		60					Self-efficacy –Environmental mastery	37	
Commerce	100	108		8			Purposeful life –Optimism	22	
Standard of Living		47					Confidence building		5
Accessing Medical Treatment		53							50
Community Development		76							
Provider		26							
		41							
		36							
				3					30
				4					40
				2					20
				5					50
				9					90

*“We got various training on health-related issues so that our health condition and environmental hygiene has got improved”*

Interestingly, when members were asked about how their educational opportunities have changed since joining the group, ‘no change’ was a high frequency response; the highest frequency response was increased access to education, predominantly for their children.

*“My children are at school and they are performing well. They have a better school life as a result of my initiative in the SHG”*

Although the training provided under SHG system is a form of education, it is likely that when asked about a change in their educational opportunities a semantic distinction was made by the participants between this training and formal schooling (with traditional classes such as reading, writing, mathematics). Thus, educational opportunities were seen to have been improved for the members’ children, as they now are able to attend school, rather than for themselves. However, more investigation is needed to determine this as a contributing factor.

Education was also mentioned with regard to what members considered important aspects of the SHG that make it work.

*“provide various training on different issues”*

*“planning skills, time management skills and money management skills”*

Education concerning financial management and the principles of saving was specifically discussed as well as giving prospective members full awareness of how the group can improve their lives and what the expected commitments of membership would be.

### **3.2.4 Social Development – Social Skills**

Before joining the SHG members commented on how socially isolated they were; many expressing how they were ‘confined to the home’ and that they had little opportunity to engage in social interaction or establish meaningful social bonds. Due to this isolation, some members did not understand the benefits of working, or existing, within a social group.

*“I did not appreciate the value of working in a team and advantage of social networking”*

*“we were not able to see each other under any circumstance”*

Due to the nature of the SHG, the biggest change to the members’ lives has been the involvement in a social group and the establishment of social relationships generally.

The SHG, by its nature, facilitates the social development of its members by providing the opportunity to work within a social group and navigate complex social dynamics. Improvements in social skills and the establishment of mutual

compassion and ‘love’ between members were seen across all groups; both of which were identified as essential to the development of trust, a major contributing factor to group success. The development of these new social relationships has led to systems of mutual social support fostering ‘communication’, ‘cooperation’ and bi-directional ‘support’.

*“I dropped many misconceptions”*

*“I started to communicate and understand others. In my social life I am experiencing forgiveness”*

*“in our group we only love and cooperation, no hatred”*

*“social skills and relationship, tolerance, working, solving common problems and living together”*

Necessarily, the SHG provides a social space where members cooperate to achieve a common or mutually beneficial goal. Perhaps the group has allowed a more harmonious social existence due to the opportunity it gives members to get to know each other, rather than the seemingly disjointed social structure they were experiencing previously. This social interaction is not limited to the SHG but broadened to include community social events and affairs. By extension, the social aspect of the SHG expands to the family units of its members as they expressed how their families also began to participate in social events.

*“by observing from my social participations, my families are also participating in various social affairs”*

*“I taught my family to develop their social life and become active in ... our community and society at larger”*

The teamwork principles of the SHG promotes a level of social networking and support by providing a social model of interaction and relationship development which can extend beyond the group itself. Members discussed how there have been increases in the level of cooperation, harmony and social support experienced within the family unit as well as their wider community. In addition, the SHG seems to act as an essential aspect of community cooperation allowing members to build self-efficacy and establish a support network for their wider locale, which is hugely empowering. The implication here is that without the SHG these support systems would not exist.

*“We (family) do things in discussion, we solve problems in team, we exercise love among us. We appreciate one’s ideas at home. We are happy by our saving, we do things in transparency”*

*“there is peace among my family members”*



*“We help visit and support others. As a group we helped those who have been displaced by flood at Dire Dawa”*

Participation in social activity is intuitively the instigator and enabler of developing solid social support systems as the SHG models the collective solving of one another’s problems. When discussing how the members’ and their families’ social circumstances have changed many expressed a general improvement in how they interact with their community; this ranged from feeling that their family is better situated to a feeling of contentment with their social life.

*“We are leading a healthy social life at home as well as outside home”*

*“We discuss and solve problems together. We became convinced that working together is more advantageous than individually doing things”*

### 3.2.5 Personal Development – psychological well-being

Personal development was a common theme throughout the data as both the personal skills and psychological well-being of SHG members have been greatly improved. Members experienced changes in attitudes, self-confidence and the ability to articulate themselves.

*“I can speak and express my ideas boldly, courageously work, confident”*

*“my speaking ability, asset creation, psychological functioning, developed confidence”*

Part of the SHG process includes confidence building and is discussed as a vital element to the maintenance of group success.

*“if members get shy or quiet we initiate them to forward their position, view and help them participate in the discussion”*

With confidence and financial security comes autonomy as members can now, *“do what [they] want to do”*. A decrease in the amount of stress and anxiety was also expressed adding to the feeling of environmental mastery where members are now able to change their situation or impact their environment due to the support gained.

*“I believe can I can change my situations”*

*“I do not have any worry as to where I can get food for my daily needs to me and my family”*

In this way, the group facilitates a sense of empowerment and competence to deal with different life circumstances and issues. Likewise, a sentiment of optimism and purpose in life was illustrated by members who now envision a brighter future as they are given

an opportunity to plan, create and tailor their future, rather than being confined by their circumstances.

*“I do have hope and vision for the future”*

*“I am able to have positive ideas and perspectives”*

### 3.2.6 Spiritual Aspects

Spiritually, SHG participation prompts members to engage in religious behaviours that may not have been part of their routine before joining the group. Increases in prayer and praising God amongst themselves and their families were reported and in some cases this practice has become part of the family routine.

*“We as a group, we start every meeting with prayer. This helped me to get awareness about spiritual importance and using it at home”*

*“Together with my family we start praying in the morning and evening”*

This increase in religious behaviour within the home may be a result of the spiritual practices experienced within the group, as many groups include opening and closing meetings with prayer. It is also likely that these behaviours add to the communal and uniting nature of the group, as well as facilitating a method of giving back for all the benefits members have accrued. These spiritual changes were reported by both main religious groups in the study – orthodox and protestant.

*“We start the meeting with prayer, so I believe God is helping us”*

*“I have all the provisions, so thanking God. For anything what happened I praise God”*

Engagement in pro-spiritual behaviours has resulted in an increase in pro-social behaviours as respect for each member’s individual religious beliefs, tolerance, forgiveness and praying for the sick were all expressed, among others.

*“Everyone’s religious outlook is respected and recognised. We live in peace. We love and forgive others”*

*“I am teaching my children spiritual affairs such as forgiveness”*

*“We developed positive attitude towards others and helping others. We also acquired the qualities of genuine, patience heart”*

*“We taught our children about tolerance and how to live harmoniously with others.”*

Cultivation of spirituality within the group has the effect of increasing adherence to the social principles and teachings that encourage peace and harmony among people which leads to effective social cooperation and contentment. Members described how internal peace has been fostered since joining the group.

*“At the beginning I did not experience internal peace, but now I have a lot of peace. Praise the Lord”*

*“I am getting spiritual rest by helping others, giving, visiting”*

It appears that the SHG provides members with an improvement in life circumstances which gives them something to give thanks for as well as an opportunity to give back some of what they received. The benefits of the SHG decrease the worries and woes of its members which, in turn, creates the mental space needed to connect with sentiments such as internal hope and peace.

## 4 Discussion

The purpose of this study was to assess the impact of SHGs on the psychosocial well-being of female members in Ethiopia. Results indicate that SHGs are positively impacting members' psychosocial well-being. Previously research had established that the Tearfund variety of SHG has economic benefits (Venton et al. 2013; Sahyoun 2016), increased drought resistance (Meehan and Mengistu 2016) and food security (Weingartner et al. 2017) but this study is the first to demonstrate psychosocial benefits.

The first research question asked whether longer SHG membership would result in greater perceived impact and scale-assessed well-being measures. Members of older SHGs reported greater psychosocial well-being on 4/10 self-assessed impact outcomes (finance, education, family and social) and 2/3 of the standardised scales. These findings are consistent with the literature indicating that the longer someone is a member of a SHG the more they benefit on a range of outcomes (Desai and Joshi 2013; Sahu 2015). Indeed, the study demonstrated a social impact that was stronger and more comprehensive than indicated in the study by Sahu (2015). It is possible that longer membership may provide necessary time for mastering the adopted SHG structure and culture (Samuel et al. 2017).

The effect sizes of SHG age were small for both self-assessed impact ( $\alpha = 0.04$ – $0.06$ ) and standardised scales; PWB ( $\alpha = 0.08$ ) and SWB ( $\alpha = 0.03$ ). In one review, effect sizes range from 0.06–0.41 SMD, meaning the current studies young and older group effect sizes were of the smallest range of similar reported sizes (Brody et al. 2016). The study also did not show significant differences on some perceived impact outcomes (psychological, spiritual, family social, health, family spiritual) and one standardised measure (spiritual well-being). Such discrepancies in the findings may be a result of the limitations of the quantitative methods used in the study. We also do not have baseline quantitative data from before involvement in SHG. However, these findings are consistent with the literature when viewed in the context of the qualitative data.

In terms of economic well-being, members were asked about their financial assets before and after joining the SHG, and they reported an average increase in asset value of 143%. That this increase is greater for older SHG further confirms the economic impact of SHGs. One possible explanation of the modest differences found between the younger vs older groups is that the majority of psychosocial benefits of SHG membership may be gained in the first two years. Future research could gather psychosocial data from members joining new SHGs as a stronger baseline for assessing the impact of the SHG.

The implication of taking a multi-dimensional approach to poverty is that solutions need to be multi-dimensional, enhancing effective capability to live valued lives and addressing social exclusion as well as economic disadvantage (Sen 1980; Wagle 2002). Rihani (2002) depicts the twin challenges of development as addressing the freedom to interact and the capability to interact; poor people need to be afforded access to social networks and the tools to effectively interact in them. Tearfund's own theory of poverty (Tearfund 2015 building on Myers 2011) focuses on restoring relationships as the key to overcoming poverty. Equally impact evaluation needs to be multi-dimensional – tapping into a range of interrelated aspects of well-being.

The perceived impact data in this study affirms the view that SHGs are not simply addressing economic well-being. One of the highest rated self-assessed impacts of the SHGs was social circumstances. This accords with the inherent nature of the SHG as a social unit. This perception is well supported by the qualitative analysis which identified themes with strong social dimensions – “social development-social skills”, “dependence-independence” and “spiritual aspects”. These themes accord with the social perspectives on poverty taken by Wagle (2002), Rihani (2002) and Tearfund (2015) described above.

One of the strongest themes to emerge from both the survey and the focus groups is an ending of social isolation. Many of the women spent their lives at home, isolated and without a social network. The SHG has been a vehicle to end this isolation, providing a cohesive social network which also acts as a springboard for wider engagement in the community. Ending social isolation addressed a frequently reported concern of the poor, as documented by Brock (1999), and is considered an instrumental step in overcoming poverty (Samuel et al. 2017; Wagle, 2002; Sen 2000; Rihani 2002).

Brock (1999) highlighted dependency as another concern for people in poverty and this was illustrated within the current data set. Indicating detrimental social ties previous to joining the SHG, members felt dependent on others for basic needs. The SHG, however, has facilitated independent access to capital allowing members to earn their own money. Thus, a form of interdependence within the SHG is established, “it is our mother, rock or shield”. This is a strongly collectivist picture of empowerment; rather than the individual becoming “autonomous”, the captain of their own ship, they gain their independence through mutual support brought about by newly established wholesome social bonds.

Since the SHG members had experienced such social isolation, the development of strong, stable and productive social dynamics required skills not yet available to all members. From initial involvement in the SHG, members go through a process of social learning to effectively manage the nuances of a complex social group. Members recognised they had a lot to learn when they joined the group, but that the group provided a very effective vehicle for that learning – “We do things in discussion, we

solve problems in team, we exercise love among us. We appreciate one's ideas at home. We are happy by our saving, we do things in transparency". This learning includes both developing the social skills to communicate, collaborate, make decisions and manage conflict as well as the attitudes (love, tolerance, trust) that are needed for them to be effective. A key element, identified by most members, is the social support provided by the group - "we visit and support each other in different social festivals such as wedding". This theme dovetails neatly with Rihani's "capability to interact" as well as Sen (1999) and Wagle's (2002) "capability".

Strong changes in psychological well-being was also illustrated by the data set. The most commonly reported change was greater self-confidence - "I do what I want to do. I developed self-confidence. I can go here and there for work purposes". Allied to this are gains in self-efficacy, purposefulness and optimism consistent with several impact studies (Moyle et al. 2006; Hashemi et al. 1996; Krishnaraj and Kay 2002; Putnam 2001). Many also reported a reduction in anxiety. A major effect of poverty is powerlessness and the anxiety that comes from believing that there is nothing you can do to prevent or even predict when negative things will happen. As such, a positive shift towards a sense of control and of hope has a profound impact on those experiencing those changes- "I can speak and express my ideas boldly, courageously work, confident, I believe I can change my situations". This qualitative change is reinforced when the individual scale items that are different in younger versus older SHGs are examined - they mostly relate to the sense of significance they have in their society.

Closely related to these improvements in psychological well-being is the explicit alleviation of poverty and an increase in finances. Most members identified the ability to generate income as one of the key ways in which the SHG had changed their lives - "able to run a business by my own capital, feeding my family better, able to send children to school, able to improve house quality and utensils". This theme represents well the multidimensionality of well-being as it spans across economic, social, psychological and spiritual dimensions; the individual has a different role (social) to provide for others (economic) which is a source of self-esteem (psychological), cause for gratitude and reason for hope (spiritual).

Training is a major factor in the psychological and cognitive well-being of its members. There are two elements of this - the training they receive in the SHG itself, and the education they can provide for themselves and their families from the additional money available to them. SHG financial training is particularly highlighted by the members - "I was participating in mini business but it was not such effective because I did not know how to manage the money". Thus, members were suffering, not only from poverty, but an inability to effectively manage what little finances they did have.. The range of other training provided by the SHG is also highlighted - planning, time management, hygiene.

Curiously, when asked about the changes since joining the SHG, members identified formal education as an area of life least affected and least contributed to by the SHG. Yet education emerged as a major theme in the survey and focus groups. In fact, it was mentioned as one of the most important aspects of the SHG in all ten focus groups. This anomaly could be because the participants perceived the survey question as asking about formal "educational opportunities" rather than the form of educational training they received in the SHG. Also, many more participants reported the SHG as providing

better opportunities for their children than for themselves (this was also found by Venton et al. 2013). The quantitative questions in the survey only asked about their own opportunities. The SHG has provided much informal capacity building and educational opportunities for its members and substantially enhanced the formal education opportunities of their children, and to some extent, themselves.

The quantitative data mostly support reported social and psychological changes. Members assess the SHG as having a significant impact on the social aspect of their lives and the well-being scale comparisons between younger and older SHGs confirm this. However, there was no significant difference in self-assessed impact of psychological perceived impacts. Brody et al. (2016) also found discrepancies between qualitative and quantitative psychological evidence believing it to be a result of either cognitive biases or inadequate measures. The level of perceived impact is high for members of both young and old SHGs so it is possible that exposure to SHG can result in an increase in psychological well-being however without baseline data it is difficult to tell.

Spiritual well-being differences did not emerge in the comparison between younger and older SHGs, either self-assessed SHG impact or on the meaning of life scale. When asked about spiritual changes in the survey and focus groups, the focus was less on personal meaning and more on social dimensions of their faith – religious behaviour (prayer with the SHG and family, attending church) and positive social behaviours. But they also highlighted attitude and character changes such as tolerance and forgiveness. These spiritual benefits accord very much with the thrust of the rationale of the SHGs – to address poverty by restoring relationships. More than personal spiritual sentiments the participants emphasised how the SHG impacted the level and consistency of their engagement with their church community and the quality of their engagement with others.

The study additionally asked if the standardised scales retain their reliability and structure on the Ethiopian sample. Each of the scales in their original forms were found to be below acceptable reliability (George and Mallery 2003). It was necessary to revise them by removing problematic items, meaning that the sub scales could not be used. The Gratitude Questionnaire (McCullough et al. 2002) and Psychological Safety Scale (Edmondson 1999) had to be dropped entirely. Thus, providing only partial support that the scales could retain reliability and structure. The difficulties with the standardised scales may also have impacted the effect sizes. The western constructs of well-being embedded in the scales may not be fully congruous with the local cultures. Some work needs to be done to develop culturally appropriate ways of measuring well-being, whether it means merely adjusting existing scales or developing new ones.

The study has several limitations. In general, impact evaluations have been criticised for methodological quality (Armendáriz de Aghion and Morduch 2005, Armendáriz and Morduch 2010, Duvendack 2011; Stewart et al. 2010). The self-report measures used rely on each member's own estimation of well-being over time and retrospective ratings. The current study did not use random assignment, rigorous sample matching and controls of RCT or pipeline methodologies (comparing future untreated clients with current clients to reduce biases). Instead it opted for a treatment-exposure focus, comparing younger to more mature SHGs. It was designed as time 1 in a longitudinal

study; applying the same measures at time 2 will provide much more robust evidence on the SHGs' impact.

Contamination from other development programmes is possible. Positive externalities such as social and economic benefits between SHG members and non-members have been reported in programme areas (Deininger and Liu 2009) and at least one study as taken place in one of the current study's regions Oromiya investigating microcredit (Tarozzi et al. 2015). It is difficult, however, to see how these could differentially affect older SHGs.

The focus groups were conducted with one or more of the group's facilitators present, with the risk of social desirability bias. This was often necessary for translation purposes, but it may have led to more positive comments being made or suppression of negative comments through wanting the SHG, and the role of their facilitator to appear in a good light. To avoid this would have required investment in independent researchers to administer focus groups and surveys, in the local language if necessary. Furthermore, the facilitator-SHG relationship is one of trust; an external researcher may not have been able to elicit such rich qualitative accounts.

It would be beneficial to develop more culturally appropriate ways of measuring well-being. This could mean merely adjusting existing scales or developing new ones. Finally, a study is planned of those "falling through the cracks" – for whom does the SHG not work. This study could start with an examination of the data from this project to identify and profile individuals for whom the SHG is not working – they are not benefiting financially and/or psychosocially.

There is significant potential to examine the findings of this research in the context of the wider SHG and peer support literature. Stratford et al. (2019) describe the international growth of peer support in mental health; the parallels to the form of peer support provided in SHGs is clear, albeit the founding rationale of the groups is different (poverty alleviation vs mental health). In a future paper we plan to explore in more detail the findings of this study on the mechanisms of influence in these SHGs and how those mechanisms relate to those at work in peer support and other forms of SHGs.

## 5 Conclusion

The results of this study support the role of SHGs as effective means of improving the multidimensional well-being of its members. It is the only study directly addressing the psychosocial impact of Tearfund SHGs in Ethiopia. The impact we have demonstrated comes across more strongly in the qualitative reports than in the quantitative where the effect sizes are small. Future studies will be strengthened by comparison with time 2 longitudinal data, by developing more culturally appropriate measures, and through collecting baseline data prior to SHG establishment.

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## Compliance with Ethical Standards

**Conflict of Interest** The senior author is a financial supporter and occasional fund-raiser for Tearfund Ireland who sponsor self-help groups in Ethiopia.

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